

THE NATURAL ENVIRONMENT OF THE UBSUNUR HOLLOW AND ITS ANTHROPOGENIC CONDITIONALITY

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Abstract. Research of the early historical epochs anthropogenic activity impact on the environment proves its influence on ecosystems dynamics and its substantial role in changing natural and climatic conditions. *Methods and results.* With the help of remote sensing (deciphering space images (Google resources, free access) and landscape observations on the area of Ubsunur Hollow, one of the largest arid hollows of Central Asia, in the neighbourhood of the Agar-Dag range numerous tracks of irrigation agriculture have been found. The absence of fresh water continuous supply in the area of ancient irrigation presupposes milder climatic conditions and the presence of forest flora maintaining the level of ground waters in the past. The presence of forest steppe landscapes on arid areas of Ubsunur Hollow in the recent past has been proved by the results of paleobotanic research on ancient agroirrigation landscapes to the south-west of Lake Shara Nur in the Upper Naryin Gol River. *Conclusion.* A big number of land allotments found in north-eastern part of Ubsunur Hollow near the Agar-Dag range (Lake Shara Nur) allows us to speak about significant water reserves (and forestry area) of this territory as well as about a big number of people living there in early epochs and who needed fuel, wood as a source of construction materials, etc., consequently forests were destroyed. They were also being destroyed during numerous wars: Central Asia is the region of constant battles between western and eastern civilizations. The conducted research proves the presence of forest flora (spruce-larch-grass-sedge communities, steppified pine forests) in the Late Quaternary period in the central part of Ubsunur Hollow on the area which is now deserted. The most probable reason of desertisation of the area is destruction of the forest. Forest devastation is the major reason of landscape degradation not only of Ubsunur Hollow but also of the whole steppe Asian belt.

Key words: Ubsunur Hollow, arid landscapes, remote sensing, ancient agriculture, anthropogenic impact on the natural environment, deforestation.